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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------------|------------------|
| 10/574,847 | 04/06/2006 | Masaki Tsujimoto | 062289 | 5518 |
| 38834 7590 11/24/2008 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW | | | EXAMINER | |
| | | | MCCLELLAND, KIMBERLY KEIL | |
| SUITE 700 WASHINGTON, DC 20036 | | | ART UNIT | PAPER NUMBER |
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| | | | 11/24/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--|--|--|
| | 10/574,847 | TSUJIMOTO ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | KIMBERLY K. MCCLELLAND | 1791 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | lely filed the mailing date of this communication. (35 U.S.C. § 133). | | | |
| Status | | | | | |
| Responsive to communication(s) filed on <u>05 Sec</u> This action is FINAL . 2b)⊠ This Since this application is in condition for allowant closed in accordance with the practice under E | action is non-final. nce except for formal matters, pro | | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 1-4 is/are pending in the application. 4a) Of the above claim(s) 3 and 4 is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1 and 2 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or | election requirement. | | | | |
| 9)☐ The specification is objected to by the Examine | r. | | | | |
| 10)⊠ The drawing(s) filed on <u>06 April 2006</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 04/06/06. | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | | | |

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DETAILED ACTION

Election/Restrictions

- 1. Applicant's election without traverse of Group I, claims 1-2 in the reply filed on September 5th, 2008 is acknowledged.
- 2. Claims 3-4 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on September 5th, 2008.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second and sixth paragraphs of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

- 4. Claims 1-2 are being treated under 35 U.S.C. 112, sixth paragraph. 35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language "shall be construed to cover the corresponding structure...described in the specification and equivalents thereof."
- 5. Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim elements "sticking means" and "pre-cut means" are means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to sufficiently disclose the

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corresponding structure, material, or acts for the claimed function. Applicant is required to:

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- (a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or
- (b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

- (a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or
- (b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 7. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0009650 to Jeong et al.
- 8. With respect to claim 1, the terms "supporting means", "pre-cut means", and "sticking means" are being treated under 35 U.S.C. 112, sixth paragraph. Jeong et al. discloses a dicing tape attaching unit, including a supporting means (122/138) for supporting a strip material attaching a film for forming dicing tapes stuck on one surface of a base sheet; a pre-cut means (135) for forming a dicing tape by forming a cut in said film in accordance with the size of said ring frame; and a sticking means (130/130') for fixing the semiconductor wafer to the ring frame by peeling off said dicing tape from the base sheet and sticking the dicing tape onto the ring frame (See Figure 8).
- 9. Examiner notes the phrases, "for fixing a semiconductor wafer to a ring frame by sticking a dicing tape to said ring frame in a state that the semiconductor wafer is disposed in an inside area of said ring frame disposed on a table", "for supporting a strip material attaching a film for forming dicing tapes stuck on one surface of a base sheet", "or forming a dicing tape by forming a cut in said film in accordance with the size of said

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ring frame" and "for fixing the semiconductor wafer to the ring frame by peeling off said dicing tape from the base sheet and sticking the dicing tape onto the ring frame" are considered intended use language of the currently claimed apparatus. The examiner would like to note that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). See MPEP § 2114.

Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,238,515 to Tsujimoto et al. in view of U.S. Patent Application Publication No. 2004/0007327 to Kobayashi.

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12. With respect to claim 1, the terms "supporting means", "pre-cut means", and "sticking means" are being treated under 35 U.S.C. 112, sixth paragraph. Tsujimoto et al. discloses a wafer transfer apparatus, including a supporting means (654) for supporting a strip material attaching a film for forming dicing tapes stuck on one surface of a base sheet; a pre-cut tape (T) in accordance with the size of said ring frame; and a sticking means (691) for fixing the semiconductor wafer to the ring frame (R) by peeling off said dicing tape from the base sheet and sticking the dicing tape onto the ring frame (See Figures 11-12). However, Tsujimoto et al. does not specifically disclose a precutting means.

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- 13. Kobayashi discloses a dicing tape applying apparatus, including it is known in the art as equivalent to substitute non-cut tape for pre-cut tape, and include a cutting means (60) for later cutting the noncut tape (See abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the precutting means taught by Kobayashi with the apparatus disclosed by Tsujimoto et al. The motivation would have been to provide an apparatus that is capable of being used with both precut and noncut tapes.
- 14. Examiner notes the phrases, "for fixing a semiconductor wafer to a ring frame by sticking a dicing tape to said ring frame in a state that the semiconductor wafer is disposed in an inside area of said ring frame disposed on a table", "for supporting a strip material attaching a film for forming dicing tapes stuck on one surface of a base sheet", "or forming a dicing tape by forming a cut in said film in accordance with the size of said ring frame" and "for fixing the semiconductor wafer to the ring frame by peeling off said

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dicing tape from the base sheet and sticking the dicing tape onto the ring frame" are considered intended use language of the currently claimed apparatus. The examiner would like to note that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). See MPEP § 2114.

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- 15. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,238,515 to Tsujimoto et al. in view of U.S. Patent Application Publication No. 2004/0007327 to Kobayashi as applied to claim 1 above, and further in view of U.S. Patent No. 5,730,816 to Murphy.
- 16. With respect to claim 2, the terms "supporting means" and "sticking means" are being treated under 35 U.S.C. 112, sixth paragraph. Tsujimoto et al. discloses a wafer transfer apparatus, including a tension control means (658) is disposed between said supporting means (654) and a sticking means (691), wherein the tension control means comprises a dancer roller (658), which is movable vertically so as to allow the strip

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material to be fed out toward said sticking means while giving tension due to its own weight to said strip material (See Figure 11). However, Tsujimoto et al. does not specifically disclose precut means or first and second sensors for detecting a raised position and a lowered position of the dancer roller respectively.

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- 17. Kobayashi discloses a dicing tape applying apparatus, including it is known in the art as equivalent to substitute non-cut tape for pre-cut tape, and include a cutting means (60) for later cutting the noncut tape (See abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the precutting means taught by Kobayashi with the apparatus disclosed by Tsujimoto et al. The motivation would have been to provide an apparatus that is capable of being used with both precut and noncut tapes.
- 18. Murphy discloses a label stripping apparatus, including first and second sensors for detecting a raised position and a lowered position of the dancer roller respectively (column 4, lines 5-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the first and second sensors taught by Murphy with the dancer roller of Tsujimoto et al. The motivation would have been to provide more responsive control of the feeding and tension of the tape web.
- 19. Examiner notes the phrases, "so as to allow the strip material to be fed out toward said sticking means while giving tension due to its own weight to said strip material", "for detecting a raised position and a lowered position of the dancer roller respectively" and "wherein, when the first sensor detects said dancer roller at the raised position, said supporting means feeds out the strip material by a predetermined amount

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to lower the dancer roller, and when the second sensor detects the dancer roller at the lowered position, said supporting means stops feeding out the strip material therefrom" are considered intended use language of the currently claimed apparatus. The examiner would like to note that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). See MPEP § 2114.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY K. MCCLELLAND whose telephone number is (571)272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Thr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip C. Tucker can be reached on (571)272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kimberly K McClelland/ Examiner, Art Unit 1791

KKM

/Philip C Tucker/ Supervisory Patent Examiner, Art Unit 1791